

Cedefop monitoring of vocational education and training policies and systems

Progress towards the medium-term deliverables
of the Riga conclusions

Country chapter

SPAIN

Developments in vocational education and training policy
in 2015-19

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Introduction

In June 2015, the ministers in charge of vocational education and training in the EU Member States, the candidate countries and the European Economic Area countries, convened in Riga, agreed on objectives for vocational education and training (VET) policies for 2015-20 ⁽¹⁾.

Cedefop has been entrusted with monitoring the countries' policies implemented towards reaching these objectives.

This country chapter is part of the monitoring process. It was drafted based on input from the national ReferNet team. It presents an overview of the major policy developments that have taken place in the country in 2015-19, in the areas covered by the Riga medium-term deliverables (MTDs).

The country chapter is structured as follows:

- (a) the introductory section Aspects of vocational education and training context in 2015 briefly sketches the VET context in the country in 2015, highlighting selected figures and major policy initiatives that were just being adopted or started at that time. This introductory section is targeted at setting a baseline to put in perspective the policy choices and developments that have taken place since the beginning of the Riga cycle;
- (b) five thematic chapters then follow, devoted to the five respective MTDs outlined in the Riga conclusions. Each thematic chapter also begins with a 2015 baseline, more specifically addressing the MTD-related topics. The baseline is followed by the presentation of the major policy developments in the MTD since 2015;
- (c) the country chapter ends with a conclusion summarising the main lines of the 2015-19 policy developments and highlighting possible priorities for the future.

This country chapter is part of the information which the European Commission used to prepare the European Semester exercises ⁽²⁾ in 2017-19.

(1) *Riga conclusions 2015 on a new set of medium-term deliverables in the field of VET for the period 2015-20, as a result of the review of short-term deliverables defined in the 2010 Bruges communiqué:*

https://www.izm.gov.lv/images/RigaConclusions_2015.pdf

(2) European Semester: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester_en

The chapter also informs the work of Cedefop and the European Training Foundation (ETF) in preparing a joint monitoring report on the implementation of the Riga conclusions. Both the joint report and the country chapter are aimed at informing the work of EU Member States' Directors General for Vocational Training (DGVTS) and Advisory Committee for Vocational Training (ACVT) on taking stock of the outcomes of the Riga conclusions and preparing the next steps for the EU VET policy for the next few years.

Aspects of vocational education and training context in 2015

At the beginning of the reporting period ⁽³⁾, the proportion of upper secondary students enrolled in vocational education and training (VET) programmes in Spain was below the EU average: 34.4% in 2014 compared to 48% in the EU (Cedefop, 2017a, p. 61); 35% in 2015 compared to 47% in the EU ⁽⁴⁾. 100% of upper secondary initial vocational education and training (IVET) students were following work-based programmes in 2014 (whether on dual track or not) ⁽⁵⁾, against 34% in the EU (Cedefop, 2017a, p. 61). The employment rate of recent upper secondary graduates was also low: 54.7% in 2014 (European Commission, 2015) and 54.9% in 2015 (European Commission, 2015) compared to 70.8% and 74.1% in the EU respectively. Adult participation in lifelong learning was below the EU average: 9.8% in 2014 (European Commission, 2015) and 9.9% in 2015 compared to 10.7% on average in the EU in both years (Cedefop, 2017a, p. 61) (Table 1).

The education and training system in the country was faced with the challenge of bringing young people's skills closer to labour-market needs; consequently, VET qualifications in the education system have been updated with the aid of business. VET had to gain in attractiveness. There was a need to increase the in-company training period so as to bring students closer to employers and provide the former with greater employment opportunities, especially in times of economic crisis and high unemployment. Dual VET had been introduced in 2012 and was in place in all autonomous communities by 2014. New incentives for involving enterprises in dual training were being set up. A reform of the training system within the public employment service was underway, and the introduction of a personal training account was being prepared.

⁽³⁾ This introductory section presents the 2015 state-of-play in the MTD as a baseline for the monitoring exercise. Most of the situation it describes has remained unchanged over the reporting period and is therefore still in place at the end of the reporting period. The next sections in this MTD focus on what has changed with respect to this 2015 baseline, and how.

⁽⁴⁾ Eurostat, data for 2015.

⁽⁵⁾ *Instituto Nacional de las Cualificaciones – Ministerio de Educación y Formación Profesional.*

Table 1. Framework data: score on VET indicators in Spain and in the EU: 2010-15

Indicator label	2010		2015 (*)		Trend in 2011-15 (per year)		
	ES ^f	EU ^f	Yr	ES ^f EU ^f	Range	ES	EU
Access, attractiveness and flexibility							
IVET students as % of all upper secondary students	A	A	'14	34.4 ^b 48.0 ^b _{E1}	'13-'14	0.9	-0.9
IVET work-based students as % of all upper secondary IVET	A	A	'14	1.3 ^b 34.0 ^b _{E2}			
IVET students with direct access to tertiary education as % of all upper secondary IVET			'14	63.5 69.2 ^{E3}	'13-'14	0.6	-1.4
Employees participating in CVT courses (%)	48.0	38.0 ^e	'10	48.0 38.0 ^e			
Employees participating in on-the-job training (%)	20.0	20.0 ^e	'10	20.0 20.0 ^e			
Adults in lifelong learning (%)			'15	9.9 ^b 10.7 ^b	'14-'15	-0.2	-0.1
Enterprises providing training (%)	75.0	66.0 ^e	'10	75.0 66.0 ^e			
Female IVET students as % of all female upper secondary students	A	A	'14	31.7 ^b 42.7 ^b _{E1}	'13-'14	0.7	-1.0
Employees of small firms participating in CVT courses (%)	35.0	25.0 ^e	'10	35.0 25.0 ^e			
Young VET graduates in further education and training (%)			'15	39.2 ^b 33.0 ^b	'14-'15	-0.9	-0.3
Older adults in lifelong learning (%)		5.3	'15	5.0 ^b 6.9	'14-'15	0.1	0.1
Low-educated adults in lifelong learning (%)	4.9		'15	3.6 ^c 4.3 ^b _C	'13-'15	-0.5	-0.1
Unemployed adults in lifelong learning (%)			'15	11.2 ^b 9.5 ^b	'14-'15	-0.8	-0.3
Individuals who wanted to participate in training but did not (%)	10.2 ^B	9.5 ^e _B	'11	10.2 9.5 ^e			
Job-related non-formal education and training (%)	82.5 ^B	80.2 ^e _B	'11	82.5 80.2 ^e			
Skill development and labour market relevance							
IVET public expenditure (% of GDP)			'13	0.33 ^b 0.56 ^b _{E4}	'12-'13	0.01	0.03
IVET public expenditure per student (1 000 PPS units)			'13	7.0 ^b 6.4 ^b _{E5}	'12-'13	-0.9	0.0
Enterprise expenditure on CVT courses as % of total labour cost	0.8	0.8 ^e	'10	0.8 0.8 ^e			
Average number of foreign languages learned in IVET			'14	0.2 ^b 1.0 ^b _{E6}	'13-'14	0.0	0.0
STEM graduates from upper secondary IVET (% of total)	A	A	'14	22.3 ^b 30.0 ^b _{E7}	'13-'14	1.3	-0.4
Short-cycle VET graduates as % of first time tertiary education graduates			'14	33.7 9.3 ^{E8}	'13-'14	-0.5	0.4
Innovative enterprises with supportive training practices (%)		41.5 ^{E9}	'12	23.6 ^b 41.6 ^{E9}			
Employment rate for IVET graduates (20- to 34-year-olds)			'15	70.2 ^b 77.2 ^b	'14-'15	3.0	0.3
Employment premium for IVET graduates (over general stream)			'15	0.4 ^b 5.3 ^b	'14-'15	-3.3	-1.0
Employment premium for IVET graduates (over low-educated)			'15	14.0 ^b 23.7 ^b	'14-'15	0.9	-0.1

Indicator label	2010		2015 (*)		Trend in 2011-15 (per year)			
	ES ^f	EU ^f	Yr	ES ^f	EU ^f	Range	ES	EU
Workers helped to improve their work by training (%)			'15	85.4	83.7			
Workers with skills matched to their duties (%)	53.1	55.2	'15	55.5	57.3	'10-'15	▪ 0.5	▪ 0.4
Overall transitions and labour market trends								
Early leavers from education and training (%)	28.2	13.9	'15	20.0 ^c	11.0 ^c	'10-'15	↘ -1.6	↘ -0.6
30- to 34-year-olds with tertiary attainment (%)	42.0	33.8	'15	40.9 ^c	38.7 ^c	'10-'15	↘ -0.1	↗ 1.0
NEET rate for 18- to 24-year-olds (%)		16.6	'15	20.1 ^b	15.8	'14-'15	▪ -2.0	▪ -0.7
Unemployment rate for 20- to 34-year-olds (%)	24.8	13.1	'15	28.7	12.9	'10-'15	↗ 1.0	↗ 0.1
Employment rate of recent graduates (%)	70.6	77.4	'15	65.2 ^c	76.9 ^c	'10-'15	↘ -1.0	↘ -0.2
Adults with lower level of educational attainment (%)	47.1	27.3	'15	42.6 ^c	23.5 ^c	'10-'15	↘ -0.9	↘ -0.8
Employment rate for 20- to 64-year-olds (%)	62.8	68.6	'15	62.0	70.0	'10-'15	↘ -0.3	↗ 0.3
Employment rate for 20- to 64-year-olds with lower level of educational attainment (%)	52.5	53.4	'15	50.6 ^c	52.6 ^c	'10-'15	↘ -0.6	↘ -0.2
Medium/high-qualified employment in 2020 (% of total)			'16	67.7 ^d	82.8 ^d			

(*) The data in this column are the data available in 2016. Where 2015 data were not available, data from previous years were used.

(^a) UOE (UNESCO OECD Eurostat) back reconstruction of 2010 values based on ISCED (international standard classification of education) 2011 not yet available.

(^b) AES (adult education survey) 2011, used as proxy for 2010 baseline.

(^c) 2014 b flags in Eurostat online tables ignored on the basis of other relevant Eurostat metadata.

(^d) Forecast made in 2016.

(^{E1}) Based on 28 countries; partial information for NL.

(^{E2}) Based on 25 countries (missing: ES, PL, RO); partial information for NL.

(^{E3}) Based on 27 countries (missing: NL); partial information for EL, IT.

(^{E4}) Based on 19 countries (missing: BE, DK, IE, EL, FR, HR, IT, PT, SK).

(^{E5}) Based on 21 countries (missing: DK, IE, EL, FR, HR, IT, PT).

(^{E6}) Partial information for NL.

(^{E7}) Based on 25 countries (missing: IT, HR, UK).

(^{E8}) Based on 23 countries (missing: BE, CY, FR, IE, UK).

(^{E9}) Based on 22 countries (missing: DE, IE, EL, NL, SI, UK).

(^b) Break after 2010, therefore baseline data not included.

(^u) Eurostat: 'low reliability'.

(^z) Eurostat: 'not applicable'.

(^e) Eurostat: 'estimated'.

NB: Definitions in the indicators table differ from those used in national legislation.

EU refers to EU-28, unless otherwise specified. Arrows ↗ or ↘ signal a positive or negative trend based on more than two data points and of magnitude 0.1 per year or more. Trends based on more than two data points but of smaller magnitude are indicated by →; trends based on two points only are marked ▪. Trends are estimated by means of regression models.

Source: Cedefop, 2017a, p. 61.

CHAPTER 1.

MTD 1 – All forms of work-based learning with special attention to apprenticeships

1.1. Baseline 2015

At the beginning of the reporting period, two VET qualification systems were in place, offered by respectively the education and employment authorities. Both systems were sharing the same consultation bodies, while governance and objectives of the qualifications and programmes were different (Cedefop ReferNet Spain, 2014, p.7). All formal qualifications awarded by both authorities were part of the national system for qualifications and vocational education and training (*Sistema Nacional de Cualificaciones y Formación Profesional, SNCFP*). In 2012, legislation had introduced the possibility for the education system to deliver VET qualifications under the regime of *Dual VET*.

In *education authority VET*, vocational programmes were offered at three levels: basic level (ISCED 353) in lower-secondary education ⁽⁶⁾; intermediate level (ISCED 354) in upper-secondary education; and higher VET (ISCED 554) in higher education (Sancha and Gutiérrez, 2016). The duration of each level was of two years. All programmes would lead to official qualifications (VET diplomas). Programmes were delivered either in full-time education or on a part-time modular basis. In addition to the practical nature of the programmes, all of them included a workplace training module (at least 240 hours in basic level, 400 hours in the other two levels) ⁽⁷⁾ offered typically in the second year of studies, taking place in a company. Practical training placements for VET students were arranged based on cooperation between education authorities, education institutions and companies. Would the programme apply under the *Dual VET* regime, two alternative approaches could be followed, i.e. either a '*learning agreement*' between the student, the education institution and a company ⁽⁸⁾, or a '*training and apprenticeship contract*'. In both cases, programme duration (in Dual VET programmes in the education remit) could be extended to three years;

⁽⁶⁾ Basic VET (FP Básica) programmes were particularly targeted at students aged 15 and at risk of leaving education without qualifications. It had been introduced by the 2013 education reform and was piloted from 2014 to 2016: Act 8/2013.

<https://www.boe.es/boe/dias/2013/12/10/pdfs/BOE-A-2013-12886.pdf>

⁽⁷⁾ Formación en centros de trabajo (FCT).

⁽⁸⁾ Called dual VET projects in the national context.

companies would be involved in 33% to 85% of the training hours; and while assessing students, the education institution would have to consider the opinion of in-company tutors & trainers and the student's work performance. In the case of a 'training and apprenticeship contract', additional conditions were to be met, in particular in terms of student age (between 16 and 25), salary (at least the minimum wage) and limiting the effective working hours to a maximum of 75% the first year and 85% the second and third years.

- (a) in *employment authority VET*, programmes were targeted at those (employed or unemployed) wishing to upskill, especially those having left education without qualifications. Two types of programmes were offered:
 - (a) training programmes to obtain a *professional certificate* (an occupational standards certificate) ⁽⁹⁾ included in the national catalogue of occupational standards ⁽¹⁰⁾; and
 - (b) other training programmes, such as the programmes offered by companies to their employees and other non-formal training for workers (employed or unemployed). Both types of programmes could be delivered face-to-face or through e-learning platforms ⁽¹¹⁾.

The *main characteristic* of both vocational qualifications systems was that professional certificate programmes and VET diplomas programmes were both associated with the national catalogue of occupational standards which listed 665 occupations. Both types of programmes were modular in nature, allowing partial certification (by accumulation of units of competences) and mutual recognition of parts of the training when moving from one training system to the other or, when returning to training to complete or gain a new qualification in a lifelong learning perspective.

In line with recommendations received in the course of the European Semester exercise and the Strategy for Entrepreneurship and Youth Employment (2013-16) ⁽¹²⁾, a national Youth Guarantee implementation plan was launched in

⁽⁹⁾ <https://www.sepe.es/HomeSepe/Personas/formacion/certificados-profesionalidad.html>

⁽¹⁰⁾ Catálogo Nacional de Cualificaciones Profesionales (CNCP).
https://incual.mecd.es/documents/35348/0/folleto_incual_2015_ingles.pdf/3763b486-bc7e-4c3c-8382-a3842e4a6e1

⁽¹¹⁾ Order ESS/1897/2013, of October 10.
<https://www.boe.es/boe/dias/2013/10/17/pdfs/BOE-A-2013-10861.pdf>

⁽¹²⁾ See ReferNet Spain (2013). *Entrepreneurship and youth employment strategy 2013-16*. National news on VET; 27.9.2013. <http://www.cedefop.europa.eu/en/news-and-press/news/spain-entrepreneurship-and-youth-employment-strategy-2013-16>

2014 ⁽¹³⁾. The scheme actions included incentives for learners to engage in dual training through 'training and apprenticeship contracts' ⁽¹⁴⁾.

Among the challenges identified during the implementation of dual VET were the limited capacity of small and medium-sized enterprises (SMEs) to hire trainees; the lack of appropriate training for in-company tutors ⁽¹⁵⁾; and the difference in governance models across regions.

1.2. Policy priorities for 2016-20

The country's priorities in this area for 2016-20, as set by the Director General for Vocational Education and Training (Education Ministry), are threefold:

- (a) for apprenticeship in dual VET programmes from the education sector:
 - i. progressively develop State-wide dual VET regulation according to Article No 42bis of the organic Act on education;
 - ii. coordinate and boost the participation of stakeholders involved in the development of dual VET;
- (d) for work-based learning in school-based VET (worksite training module):
 - i. go in depth into improving both the quality of the worksite training module (which must be successfully completed to get any VET diploma) and of the learning period in the company in dual VET;
 - ii. support the upgrade of workshops, laboratories, and simulators in education centres, in such a way that it is possible to respond better to the real needs of the production sector;
- (e) for innovation and entrepreneurship in VET schools:
 - i. continuously update the catalogue of VET diplomas and draw up new ones in response to the evolution of professional profiles, to scientific and technological changes, and to emergent sectors;
 - ii. encourage VET stakeholder relationships, through innovation, knowledge transfer, entrepreneurship and dissemination of good practices;
 - iii. implement specialisation courses for students who already have a professional training degree awarded by education authorities.

⁽¹³⁾ See ReferNet (2015). *Youth guarantee on Spanish ground*. National news on VET; 16.7.2015. <http://www.cedefop.europa.eu/en/news-and-press/news/spain-youth-guarantee-spanish-ground>

⁽¹⁴⁾ <https://www.empleate.gob.es/empleo/#/>

⁽¹⁵⁾ [Education and training monitor 2015: country analysis](#).

1.3. Main actions taken in 2015-19

1.3.1. Dual VET reform

The development of dual VET is being carried out in cooperation with the autonomous communities. In cooperation with the main stakeholders, the ministry of education and vocational training (MoE) is pursuing the regulatory work necessary to develop dual VET at national level, also monitoring and assessing the results of regional pilot experiences to meet the needs and characteristics of the Spanish business world. The initial draft was presented to social partners in May 2018 ⁽¹⁶⁾, but the new government wanted to reshape all VET, without limiting itself only to issues related to dual VET. In September ⁽¹⁷⁾, the new government presented to employers and unions a strategic agreement on VET (Section 3.2.1).

Employment authorities have also reflected the priority given to dual VET and apprenticeships, including them as structural objectives in the 2017-20 Spanish employment activation strategy ⁽¹⁸⁾ approved in December 2017. The strategy covers dual and alternance training, regarded as key for qualification, competitiveness, employability, personal and professional development.

Since January 2016, all training and apprenticeship contracts must be linked to a VET programme leading to an official qualification issued either by the education authorities (VET diplomas) or the employment authorities (professional certificates, CdPs). Training not leading to qualifications/certificates has been since been discontinued, unless it is complementary to the qualification programme undertaken by the apprentice.

At the end of 2018, new measures were approved ⁽¹⁹⁾ according to which practical training placements for intermediate and higher level VET and university students can take place not only in companies but also in institutions or entities included in training programmes. The learners concerned will be covered by the social security system (with exception of unemployment allowances) even if they

⁽¹⁶⁾ <https://www.educacionyfp.gob.es/prensa-mecd/actualidad/2018/05/20180516-fpdual.html>

⁽¹⁷⁾ <https://www.educacionyfp.gob.es/prensa-mecd/actualidad/2018/09/20180910-acuerdofp.html>

⁽¹⁸⁾ Spanish Employment Activation Strategy 2017-20.
https://www.boe.es/diario_boe/txt.php?id=BOE-A-2017-14858

⁽¹⁹⁾ Real Decreto-Ley 28/2018, de 28 de diciembre, de medidas urgentes en materia social, laboral y de empleo [Royal Decree-Law 28/2018 for the revaluation of public pensions and other urgent measures in social, labour and employment matters].
<https://www.boe.es/boe/dias/2018/12/29/pdfs/BOE-A-2018-17992.pdf>

are not remunerated. The Decree also lowers to 25 years the age limit for entering training and apprenticeship contracts (a measure triggered by the reduction of the unemployment rate below 15%).

In December 2018, the Council of Ministers approved EUR 46 million (jointly financed by the European Social Fund) to promote dual VET in regions ⁽²⁰⁾.

1.3.2. Stakeholder involvement in supporting work-based learning

The alliance for dual training (*Alianza para la FP Dual*), a private State-wide network of companies and social organisations set up in 2015, is supporting the development of dual VET among small and medium-sized enterprises (SMEs). Several working groups ⁽²¹⁾ have been set within the alliance to ensure quality of the dual VET model. Four annual meetings of this network have taken place so far, tackling key issues and showcasing experiences and testimonies of companies and trainees ⁽²²⁾.

The Chamber of Commerce of Spain, along with its regional branches, also supports the promotion and implementation of dual VET in the country. The agreement between the Chamber and the State Public Employment Service (Servicio Público de Empleo Estatal, SEPE) signed in November 2017 ⁽²³⁾ and extended up until the end of 2019 ⁽²⁴⁾, seeks to strengthen the quality and extension of the dual VET system in Spain by promoting, advising and supporting the companies taking part in it or intending to do so. Companies may receive customised advice, and attend workshops organised by the chambers about the nature and functioning of Dual VET.

Trade unions are also contributing to the development of dual VET. In January 2018, Unión General de Trabajadores, UGT published a leaflet ⁽²⁵⁾ presenting proposals for dual VET. CC.OO (the other main union) expressed concerns about how dual VET can evolve in Spain ⁽²⁶⁾.

⁽²⁰⁾ <http://www.educacionyfp.gob.es/prensa/actualidad/2018/12/20181207-programas.html>

⁽²¹⁾ <https://www.alianzafpdual.es/el-valor-de-la-alianza-grupos-de-trabajo>

⁽²²⁾ <https://www.alianzafpdual.es/iv-foro-alianza>

⁽²³⁾ <https://www.boe.es/boe/dias/2018/04/17/pdfs/BOE-A-2018-5260.pdf>. The total budget for this Agreement amounts to EUR 1,450 million, of which the Chamber of Commerce of Spain contributes with one million, coming from the joint financing of the European Social Fund (ESF), through the Operational programme for employment, training and education.

⁽²⁴⁾ <https://www.boe.es/boe/dias/2019/01/21/pdfs/BOE-A-2019-672.pdf>

⁽²⁵⁾ http://www.ugt.es/Publicaciones/FolletoAnteLaFormaci%C3%B3nDual_UGT.pdf

⁽²⁶⁾ [https://www.refernet.es/docs/default-source/documentoscolaboraciones/la-fp-dual-en-espa%C3%B1a-\(ccoo\).pdf?sfvrsn=e567796e_0](https://www.refernet.es/docs/default-source/documentoscolaboraciones/la-fp-dual-en-espa%C3%B1a-(ccoo).pdf?sfvrsn=e567796e_0)

Private institutions are also actively taking part in the implementation of dual VET. For instance, Fundación Bankia por la Formación Dual (Bankia Foundation for dual VET) ⁽²⁷⁾, promotes dual VET among companies through different initiatives ⁽²⁸⁾ – including financial support for implementing dual VET projects – and publishes reports ⁽²⁹⁾. Fundación Atresmedia and Fundación Mapfre both signed an agreement to promote VET ⁽³⁰⁾ and give visibility to companies taking part in dual VET projects.

1.3.3. Upgrading equipment

The royal decrees on every VET programme of the education system specify the most updated requirements for facilities (such as workshops and laboratories) and equipment which education institutions must comply with in order to be authorised to deliver these programmes following a work-based learning model.

1.3.4. Promotional actions to support work-based learning

The MoE has contributed to promoting work-based learning by supporting VET skills competitions at national (Spainskills), European (EuroSkills) and international levels (WorldSkills). All regional education authorities are also fostering different kind of events to promote dual VET among students, families and companies ⁽³¹⁾.

⁽²⁷⁾ <https://www.dualizabankia.com/>

⁽²⁸⁾ <https://www.dualizabankia.com/programas/>

⁽²⁹⁾ <https://www.dualizabankia.com/publicaciones/listado>

⁽³⁰⁾ www.descubrelafp.org

⁽³¹⁾ For more information see: <http://www.forodeoportunidades.es/es/>;
<http://www.educa.jccm.es/es/fpclm/jornadas-formacion-profesional-dual-castilla-mancha-2017>

CHAPTER 2.

MTD 2 – Quality assurance mechanisms in line with EQAVET and continuous information and feedback loops to IVET and CVET

2.1. **Baseline 2015**

At the beginning of the reporting period ⁽³²⁾, a quality assurance national reference point (QANRP) was in place, established in 2006. It covered IVET, CVET/adult learning, and non-formal learning. Quality assurance was addressed through the requirements set by the Ministry of Education, Culture and Sport ⁽³³⁾ in a range of areas (including syllabus content, teacher training, inspection control, legal requirements for facilities and equipment essential for the delivery of training), and through the follow up carried out by the head of the department and the head of studies in each education institution. At regional level, autonomous communities had implemented (or were piloting) quality approaches compatible with the EQAVET framework ⁽³⁴⁾. Quality standards for IVET providers were also in place and would serve as a condition for accreditation (private providers). External assessment of VET schools was carried out by the school inspectorate. Self-assessment was not covered by national regulation: it would be carried out either periodically under regional regulations/framework or at providers' own initiative. A methodology for external and internal evaluation has existed since 2009, with indicators and a model for self-assessment.

CVET providers had to be accredited. For their operations, a national quality assurance approach was still to be developed, but in practice most schools in the autonomous regions were using recognised quality systems and models. An annual evaluation plan provided data on the percentage of CVET training centres with quality certificates (EFQM, ISO and others). Self-assessment based on

⁽³²⁾ This introductory section presents the 2015 state-of-play in the MTD as a baseline for the monitoring exercise. Most of the situation it describes has remained unchanged over the reporting period and is therefore still in place at the end of the reporting period. The next sections in this MTD focus on what has changed with respect to this 2015 baseline, and how.

⁽³³⁾ Renamed Ministry of Education and Vocational Training since June 2018.

⁽³⁴⁾ European quality assurance in vocational education and training (EQAVET).

EQAVET criteria was compulsory for training programmes financed by the Ministry of Employment.

Graduate tracking was in place. Several autonomous communities had information systems that compiled data on VET learners' jobs after completion of studies. At national level, the National Institute for Evaluation of Education would collect data through the state system of education indicators. The General Council for Vocational Training ⁽³⁵⁾ and the State board of education had their own processes for collecting data, including from regional administrations, trade unions, employers, parents, teachers and students. In 2015, a report on the employability of VET graduates was released by the Ministry of Education, revealing the need for cross-referencing information on VET graduates with social security databases.

Training needs forecasting was organised in two independent systems. On the one hand, the 87 Sectoral Joint Committees (Comisiones Paritarias Sectoriales) identified their training needs per economic activity, and decided which training could be included in subsidised training plans for employed workers at state level. On the other hand, a system composed of various observatories operating under the Public Employment Service, the State Foundation for Training for Employment and the National Qualifications Institute would produce skills intelligence and training needs forecasting. The results were used by regional governments, education providers, and labour counsellors (EEPO, 2015).

2.2. Quality assurance mechanisms in line with EQAVET

The country's priorities in this matter for 2016-20, as set by the Director General for Vocational Education and Training (Education Ministry), are to:

- (a) detect and assess, in coordination with the autonomous regions, new criteria and quality indexes in VET, to increase and complete the quality assurance framework which already exists;

⁽³⁵⁾ In 2018, the new government reactivated the role played by the General Council for Vocational Training. Within the Council, five working groups were set to improve VET quality:

- (a) development, evaluation and quality of the entire VET system;
- (b) professional information and guidance;
- (c) national reference centres and integrated vocational training centres;
- (d) dual VET;
- (e) accreditation of professional competences acquired through work experience.

- (b) create and organise, in collaboration with the autonomous regions, the VET in education quality network, to coordinate planning, development and assessment actions and measures to improve VET in education;
- (c) establish, in collaboration with the corresponding autonomous regions, dual VET quality assurance mechanisms.

The new government which took office in 2018 announced priorities aimed to improve the design of occupational standards. These are the basis for shaping the provision of VET qualifications, both in the education and employment remits.

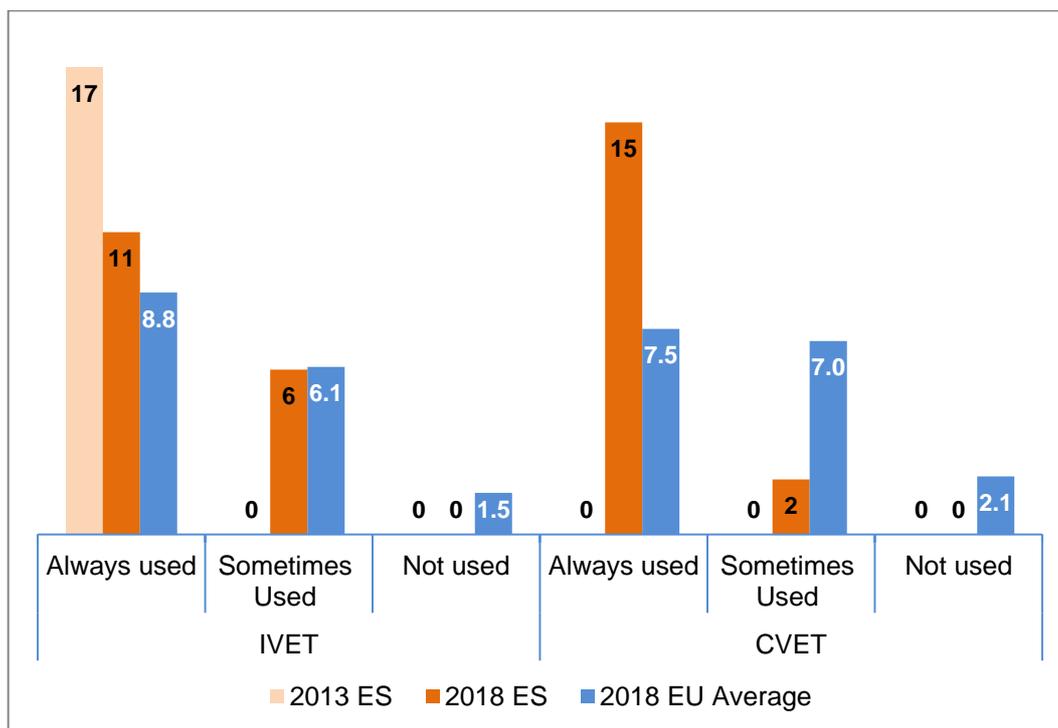
During the reporting period, the Directorate General of Vocational Training has been working with the autonomous regions to align further the quality assurance framework in IVET to the EQAVET recommendation.

Most information for monitoring the VET system is gathered from, and used by, the regional authorities. During the reporting period, discussions focused on bringing the most relevant information from the regional authorities to the national level.

During the fourth quarter of 2018, the National Institute of Qualifications (INCUAL) carried out a review process of the entire national catalogue of occupational standards, in order to set up a 2019 work plan that would accommodate the needs for updating occupational standards and (where appropriate) designing new ones which could have greater significance or impact on employment. The resulting INCUAL work plan for 2019 addressed 192 actions, which varied from designing new occupational standards to redefining learning outcomes.

In 2018, Spain was above the EU average in the systematic use of EQAVET indicators to monitor the VET system ('always used' item in Figure 1), both in IVET and CVET.

Figure 1. Use of EQAVET indicators



NB: Of the 17 indicators suggested by the 2009 EQAVET recommendation, 17 were 'always used' in IVET in 2013 in Spain, compared to 11 in 2018 and 8.8 in the EU on average.

In 2013, no reply was provided for the use CVET indicators.

EU average was calculated based on available information for 31 out of 35 VET systems.

Source: Cedefop calculations based on EQAVET Secretariat surveys for 2013 and 2016 data.

2.3. Continuous information and feedback loops in IVET in 2015-19

For 2016-20, the country's priorities in this matter, as set by the Director General for Vocational Education and Training (Education Ministry), are to:

- (a) coordinate the continuous collection of information and data about results, initiatives, concerns, problems or obstacles in the development of VET through a sectoral conference of the education administrations of the different autonomous regions;
- (b) establish different regular communication channels with different productive sectors and different professional observatories, as well as with individuals, to allow the continuous and steady improvement of VET.

The new government, which took office in 2018, announced priorities aimed at enhancing prospective mechanisms for training needs identification and fostering a major role of companies in the design of qualifications.

From March 2018 to January 2019, 19 occupational standards were updated and four new ones developed. 68 professional certificate programmes (repertoire of professional certificates) were submitted to the General Council for Vocational Training. Sustained interaction with companies ensured responsiveness to labour market needs. Thirteen VET diplomas (six in basic VET, two intermediate and five in higher VET levels) were also updated, and 15 new diplomas designed, also based on cooperation between education institutions and sectors. Eight new VET diplomas have been approved since March ⁽³⁶⁾ and new ones are in the pipeline ⁽³⁷⁾.

Since December 2015 the Ministry of Education's statistics department has provided VET-related data separated from the rest of education levels in an effort to improve transparency and access.

Since September 2017, several collaboration agreements between the State Public Employment Service (Servicio Público de Empleo Estatal, SEPE), the

⁽³⁶⁾ Royal Decree 73/2018, technician in access and conservation in sports facilities.

<https://www.boe.es/boe/dias/2018/02/20/pdfs/BOE-A-2018-2328.pdf>

Royal Decree 74/2018, of February 19, Technician in assembly of structures and installation of aeronautical systems.

<https://www.boe.es/boe/dias/2018/02/20/pdfs/BOE-A-2018-2329.pdf>

Royal Decree 90/2018, of March 2, Technician in maintenance of wooden structures and furniture of recreational boats.

<https://www.boe.es/boe/dias/2018/03/03/pdfs/BOE-A-2018-2998.pdf>

Royal Decree 91/2018, of March 2, Technician in recreational boats maintenance.

<https://www.boe.es/boe/dias/2018/03/03/pdfs/BOE-A-2018-2999.pdf>

Royal Decree 189/2018, of April 6, Technician in Food products marketing.

<https://www.boe.es/boe/dias/2018/04/07/pdfs/BOE-A-2018-4748.pdf>

Royal Decree 1444/2018, of December 14, Higher Technician in aeromechanical maintenance of aircraft with piston engine.

<https://www.boe.es/boe/dias/2019/01/18/pdfs/BOE-A-2019-544.pdf>

Royal Decree 1445/2018, of December 14, Higher Technician in aeromechanical maintenance of aircraft with turbine engine.

<https://www.boe.es/boe/dias/2019/01/18/pdfs/BOE-A-2019-545.pdf>

Royal Decree 1446/2018, of December 14, Higher Technician in helicopter maintenance with helicopter engines. <https://www.boe.es/boe/dias/2019/01/18/pdfs/BOE-A-2019-546.pdf>

Royal Decree 1447/2018, of December 14, Higher Technician in aeromechanical maintenance of helicopters with turbine engine.

<https://www.boe.es/boe/dias/2019/01/18/pdfs/BOE-A-2019-547.pdf>

⁽³⁷⁾ <http://www.educacionyfp.gob.es/servicios-al-ciudadano-mecd/informacion-publica/consulta-publica-previa/cerrados/2018.html>

Ministry of Education, and eleven autonomous regions ⁽³⁸⁾ have been approved. The agreements allow for implementing work plans ⁽³⁹⁾ of twenty-five national reference centres, NRCs ⁽⁴⁰⁾, of the 52 planned. NRCs are in charge of piloting innovative training actions, analysing labour market and training needs, assessing professional certificates, promoting good practices in VET, and establishing collaboration agreements involving businesses, universities, and R&D agents.

2.4. Continuous information and feedback loops in CVET in 2015-19

Vocational training for employment from a labour angle was last reformed in 2015 ⁽⁴¹⁾. The reform aimed at an efficient system for monitoring and prospecting the labour market, based on the coordination of all actors (administrations, social agents, experts). It also aimed at promoting the assessment of the impact of training: on accessing and maintaining employment; enhancing competitiveness of enterprises; improving workers' skills; meeting labour market needs; and ensuring efficient use of resources. A subsequent regulation followed ⁽⁴²⁾, but it needs further development and regulations.

During the reporting period, various reports evaluating different initiatives that promote training at work were made available:

⁽³⁸⁾ <http://prensa.empleo.gob.es/WebPrensa/noticias/laboral/detalle/3135> and <https://www.sepe.es/HomeSepe/Personas/formacion/centros-de-referencia-nacional/planes-de-trabajo.html>

⁽³⁹⁾ <https://www.sepe.es/HomeSepe/Personas/formacion/centros-de-referencia-nacional/que-son-los-CRN.html>

⁽⁴⁰⁾ Public institutions specialised in the different professional branches, in charge of carrying out innovation and experimentation initiatives in the area of vocational training, as well as teacher and tutor training.

⁽⁴¹⁾ Act 30/2015. Head of State (2015). Ley 30/2015, de 9 de septiembre, por la que se regula el sistema de formación profesional para el empleo en el ámbito laboral [Act 30/2015, of September 9, which regulates the vocational training for employment system in the labour scope]. <https://www.boe.es/boe/dias/2015/09/10/pdfs/BOE-A-2015-9734.pdf>

⁽⁴²⁾ Real Decreto 694/2017, de 3 de julio, por el que se desarrolla la Ley 30/2015, de 9 de septiembre, por la que se regula el Sistema de Formación Profesional para el Empleo en el ámbito laboral [Royal Decree 694/2017, of July 3, which develops Law 30/2015, of September 9, which regulates the Vocational Training System for Employment in the workplace] https://www.boe.es/diario_boe/txt.php?id=BOE-A-2017-7769

- (a) the *Report on the annual plan for evaluation of the quality, impact and efficiency of the vocational training system for employment 2015/16* ⁽⁴³⁾ was presented to the General Council of the National Employment System (CGSNE) in November 2018;
- (b) reports by the State Foundation for Training in Employment (Fundae) on evaluations which were carried out throughout 2018, including:
 - (i) evaluation report on the efficacy and efficiency of company training. Years 2015/16 (not published yet);
 - (ii) evaluation report on the quality of company training courses from the results of the questionnaire filled by the participating workers. Year 2015;
 - (iii) evaluation report on the quality of the training providers of continuous training. 2016 (not published yet).
- (c) reports by SEPE's Observatory of occupations on
 - (i) prospective sectoral studies (Retail Trade Sector) (44);
 - (ii) job opening profiles (45);
 - (iii) forecasting and identification of training needs (46).

Reference guides developing the common employment services portfolio were approved and published ⁽⁴⁷⁾. These reference guides, developed jointly with the regions, comprise protocols for:

⁽⁴³⁾ See: https://www.sistemanacionalempleo.es/evaluacion_formacion.html
Abstract available in English [here](#).

⁽⁴⁴⁾ These studies analyse the situation, trends and evolution of a specific sector, in terms of employment and economic activities including the competences most in-demand in companies and training needs derived from new sector activities and technological changes.

<https://www.sepe.es/indiceObservatorio/buscar.do?tipo=5&indice=5&idioma=es>

⁽⁴⁵⁾ These reports look in depth into professional profiles and skills required by companies to fill their jobs. They contain information on the occupations that are offered by Internet companies, featuring the specific skills required to perform the job and the profile required of the candidate, with four focus points: personal characteristics, training and competence, languages, and computing and personal competence.

<https://www.sepe.es/indicePerfiles/indicePerfiles.do?idioma=es>

⁽⁴⁶⁾ Informe de prospección y detección de necesidades formativas [Identification of training needs]. <https://www.sepe.es/HomeSepe/que-es-el-sepe/observatorio/necesidades-formativas.html>

⁽⁴⁷⁾ MEYSS (2018). Orden ESS/381/2018, de 10 de abril, por la que se aprueba la Guía técnica de referencia para el desarrollo de los protocolos de la Cartera Común de Servicios del Sistema Nacional de Empleo. [Order ESS/381/2018, of April 10, approving the Technical Guide of reference for the development of the protocols of the Common Employment Services Portfolio of the National System of Employment].

- (a) career guidance;
- (b) qualification and training for employment;
- (c) self-employment and entrepreneurship guidance;
- (d) labour intermediation.

Also, the State Foundation for Training in Employment (Fundación Estatal para la Formación en el Empleo, Fundae) is testing big data techniques to improve skills anticipation and use them to design public training programmes in the short, medium and long term. A software tool is being developed to classify automatically the training actions (TTAA) that companies offer to their employees. To do this, automatic classification algorithms based on text mining are used to compare the textual information of the training actions, classifying them by adding an indicator of the accuracy of the task. This incorporates a novelty score for each TTAA that facilitates the identification of emerging trends in learning content. This functionality, in the development phase, will allow adding new categories to be taken into account in future classifications of TTAA (automatic learning).

CHAPTER 3.

MTD 3 – Access to VET and qualifications for all through more flexible/permeable systems, guidance and validation of non-formal and informal learning

3.1. Baseline 2015

At the beginning of the reporting period ⁽⁴⁸⁾, Spain was faced with the challenges of high youth unemployment rates (53.2% in 2014 for those aged 15 to 24) ⁽⁴⁹⁾; high level of early school leaving and high rates of grade repetition. In 2015 the rate of early school leaving reached 20%, an improvement as compared to 28.2% in 2010, but still far from the 2020 national target of 15% and from the EU-28 average of 11%. Grade repetition (35% of students by the age of 15) ⁽⁵⁰⁾ contributed to student dropout, and was costly to the system (8% of education expenditure in primary and secondary education) ⁽⁵¹⁾.

Within the EU's annual round of policy coordination, the country had repeatedly been recommended to reduce early school leaving in VET, fight youth unemployment (for example through Youth Guarantee schemes), and accelerate the modernisation of its public employment services to ensure effective personal counselling and guidance.

In 2013, the Organic Law for the Improvement of Educational Quality (LOMCE, 2013) ⁽⁵²⁾ aimed to increase flexibility in lower secondary education, and improve transition to and completion in upper secondary vocational programmes. This was to be achieved by introducing a new VET pathway, Basic VET, at lower secondary level, as an alternative to compulsory general education for learners aged 15. The Basic VET programme comprised modules

⁽⁴⁸⁾ This introductory section presents the 2015 state-of-play in the MTD as a baseline for the monitoring exercise. Most of the situation it describes has remained unchanged over the reporting period and is therefore still in place at the end of the reporting period. The next sections in this MTD focus on what has changed with respect to this 2015 baseline, and how.

⁽⁴⁹⁾ Eurostat, table [yth_empl_090] (extracted on 12.3.2018).

⁽⁵⁰⁾ OECD. Education Policy Outlook Spain, 2014.

⁽⁵¹⁾ OECD. Education Policy Outlook Spain, 2014.

⁽⁵²⁾ Ley Orgánica para la Mejora de la Calidad Educativa (LOMCE).

encompassing general and professional competences. It led to VET qualification and gave the right to progress to upper-secondary VET.

Education authorities had promoted guidance within the education system since the 2006 Programme for reinforcement, support and guidance (PROA) ⁽⁵³⁾. The Todofp portal ⁽⁵⁴⁾ was in place, providing integrated information on VET.

A procedure for the evaluation and accreditation of professional competences acquired by work experience and non-formal training was also in place since 2009.

A Youth Guarantee Implementation Plan (YGP) ⁽⁵⁵⁾ had been set up in 2013 to offer to all youth aged under 25 opportunities of employment or training within four months upon finishing education or becoming unemployed.

The 2014-16 Employment Activation Strategy ⁽⁵⁶⁾ laid down the conceptual and organisational framework for employment activation and vocational training policies in the employment remit. The Strategy outlined the need for improving the quality of vocational training for employment. The Employment Law was modified accordingly in 2014 ⁽⁵⁷⁾ and changes in the system of vocational training for employment were also approved and implemented ⁽⁵⁸⁾ in the reporting period.

3.2. Policy priorities for 2016-20

The country's priorities in this area for 2016-20, as set by the Director General for Vocational Education and Training (Education Ministry), are threefold:

⁽⁵³⁾ Plan de Refuerzo, Orientación y Apoyo (PROA):

<http://www.sepe.es/LegislativaWeb/verFichero.do?fichero=09017edb800d1b31>

⁽⁵⁴⁾ <http://www.todofp.es/>

⁽⁵⁵⁾ Youth guarantee implementation plan:

http://www.empleo.gob.es/ficheros/garantiajuvenil/documentos/plannacionalgarantiajuvenilanexo_en.pdf

⁽⁵⁶⁾ <https://www.boe.es/boe/dias/2014/09/23/pdfs/BOE-A-2014-9623.pdf>

⁽⁵⁷⁾ Law 18/2014 modified Law 56/2003 of employment:

<https://www.boe.es/boe/dias/2014/10/17/pdfs/BOE-A-2014-10517.pdf>

⁽⁵⁸⁾ Head of State (2015). Ley 30/2015, de 9 de septiembre, por la que se regula el sistema de formación profesional para el empleo en el ámbito laboral [Act 30/2015, of September 9, which regulates the vocational training for employment system in the labour scope]. <https://boe.es/boe/dias/2015/09/10/pdfs/BOE-A-2015-9734.pdf>

Real Decreto 694/2017, de 3 de julio, por el que se desarrolla la Ley 30/2015, de 9 de septiembre, por la que se regula el Sistema de Formación Profesional para el Empleo en el ámbito laboral [Royal Decree 694/2017, of July 3, which develops Law 30/2015, of September 9, which regulates the Vocational Training System for Employment in the workplace.] https://www.boe.es/diario_boe/txt.php?id=BOE-A-2017-7769

- (a) for young people: track measures related to access to VET included in Organic Law 2/2006, in its wording given by Organic Law 8/2013 on improving education quality (LOMCE);
- (b) for adults:
 - (i) review the offer and implementation of VET that uses distance-teaching;
 - (ii) improve and streamline procedures for evaluation and accreditation of professional skills acquired through work experience, as well as recognition of prior learning to pursue vocational training courses, with the aim of making a return to education more attractive in order to continue training without relearning what is already learned;
 - (iii) track and evaluate the implementation of partial and modular VET offers;
- (c) on information and guidance:
 - (i) elaborate an integrated career information and guidance system;
 - (ii) make tools available to citizens for making decisions about their future training or employment;
 - (iii) make resources for teacher orientation available, by promoting the use of information and communication technology;
 - (iv) contribute to gender equality through the development of information and guidance materials that improve the access of women and men to VET in profiles traditionally associated with the opposite gender;
 - (v) reduce early school leaving and dropout rates in post-compulsory levels.

3.3. Main actions taken in 2015-19

3.3.1. Strategic boost to VET

The new government, in power since June 2018, reorganised the State administration. The change of name of the educational administration, now Education and Vocational Training Ministry (previously Education, Culture and Sports), reflects the new strategy to promote VET ⁽⁵⁹⁾.

⁽⁵⁹⁾ See ReferNet Spain (2018). *VET takes the lead in the Ministry of Education*. National news on VET; 10.9.2018. <http://www.cedefop.europa.eu/en/news-and-press/news/spain-vet-takes-lead-ministry-education>

In October 2018, the government presented the Strategic plan for vocational training under education authorities ⁽⁶⁰⁾. The plan aims to make VET more responsive to the needs of the productive system, meeting the skills demands in a quick and prospective way. In February 2019, the Council of Ministers published the Agenda for change (Agenda del Cambio) ⁽⁶¹⁾. This includes measures to enhance training and human capital, among which two are of special relevance for VET:

- (a) a Strategic plan for dual vocational training, according to which, in each sector, companies would take a major role in the design of occupational standards and related training as well as in the training of students and the updating of the teaching staff;
- (b) a reform of the catalogue of occupational standards, to meet labour market needs of the economy of the 21st century. The idea is to update, in coordination with social partners and with private sector involvement, the contents of this catalogue as a basis for the subsequent design and/or update of professional certificates and current VET diplomas (further developing cybersecurity, collaborative robotics, Big Data, 2D and 3D manufacturing, extended reality and virtual reality).

3.3.2. Guidance

The process towards an integrated vocational guidance system in education was initiated in 2018. A working group was set up within the General Council for Vocational Training, with the aim of laying down basic principles and legal provisions.

In guidance under education authorities, emphasis is being put on preventing early school leaving and fostering career management skills, while keeping to the lifelong learning perspective.

In guidance under employment authorities, the Action plan for youth employment (2019-21) ⁽⁶²⁾ foresees the hiring of 3 000 professional counsellors by the regional PES to provide guidance services in connection to the common

⁽⁶⁰⁾ ReferNet Spain (2019). *New steps to boost VET*; National news on VET; 15.2.2019
<http://www.cedefop.europa.eu/en/news-and-press/news/spain-new-steps-boost-vet>

⁽⁶¹⁾ http://www.mineco.gob.es/stfls/mineco/ministerio/ficheros/190208_agenda_del_cambio.pdf

⁽⁶²⁾ <https://www.boe.es/boe/dias/2018/12/08/pdfs/BOE-A-2018-16793.pdf>
https://www.sepe.es/contenidos/personas/encontrar_empleo/plan-choque-empleo-joven-2019-2021.html
<http://prensa.mitramiss.gob.es/WebPrensa/noticias/ministro/detalle/3419>

services portfolio. The offer will cover information, career guidance, motivation, advice, diagnosis, definition of professional profile and skills, design and management of individual learning pathways, and job search. Young immigrants will receive comprehensive assistance for their labour market integration. The Action plan was prepared in consultation with a range of stakeholders ⁽⁶³⁾. It will be evaluated after 18 months of operation.

3.3.3. Permeability, flexibility, progression

In mid-2016, the ministry of education, culture and sport initiated the preparation of a regulation on admission to VET. With respect to the entrance criteria for the three levels of VET (basic, intermediate and higher), the objective is to establish a basic framework and uniform criteria for the regional education administrations, so that a shared minimum common approach applies throughout the national territory.

3.3.4. Validation

A procedure for the evaluation and accreditation of professional competences acquired by work experience and non-formal training has been in place since 2009 ⁽⁶⁴⁾. The regions implement the validation process through public calls published (jointly or not) by education and labour authorities at regional level. The calls lay down the occupational standards and sectors involved.

The National Institute of Qualifications (INCUAL) elaborates, and makes available to all administrations, the support instruments for the procedure for the evaluation and accreditation of professional competences. The aim is to standardise the procedures and instruments used by all regions and adjust them to the specific characteristics of each professional field.

Within the General Council for Vocational Training, a working group has been set up to review the results obtained during the almost 10 years of implementation of this procedure. Data are collected through a platform established by INCUAL.

⁽⁶³⁾ The autonomous communities and the most representative trade union and business organisations have been consulted. Contributions have also been made by local entities, different social and economic partners, as well as entities responsible for youth, education and social services.

⁽⁶⁴⁾ Demand for recognition is driven by company needs, social partner requests or minimum qualification requirements from sectoral regulatory bodies. In 2015-17, regions published calls for evaluation and accreditation actions covering most sectors.

Validation is also carried out through the *Reconoce* project ⁽⁶⁵⁾, launched in 2015 upon approval by the Spanish Youth Institute (INJUVE) and the youth departments of the autonomous communities. The project aimed to establish a new recognition system for non-formal education, covering the entire youth sector. Currently, there are over 100 collaborating entities engaged in this voluntary procedure, by which young volunteers (between 12-35 years of age) can obtain certification on 12 competences, including negotiation, teamwork, interpersonal communication, and organisation and planning. This certificate will add value to the curriculum of young people who participate in volunteer associations, providing them with a competitive advantage in the labour market ⁽⁶⁶⁾.

3.3.5. Training, reskilling and upskilling vulnerable groups, jobseekers and employees

The 2018 annual plan for the employment policy (*plan anual de políticas de empleo, PAPE*) ⁽⁶⁷⁾ includes as objectives: to promote the activation and improvement of the employability of young people; to promote employment as the main instrument of social inclusion and for the insertion of the long-term unemployed and those over 55 years of age; to promote a training offer according to the needs of the productive system; to improve the performance of the public employment services (PES); and to approach activation policies from a perspective that takes into account their sectoral and local dimensions.

3.3.5.1. Raising employability for ICT and the digital economy

There are multiple initiatives to raise the skills of young people and workers (employed or unemployed) in ICT and the digital economy. Different public bodies are involved, in some cases in partnership with industry.

⁽⁶⁵⁾ <https://www.reconoce.org/>

⁽⁶⁶⁾ <http://www.injuve.es/prensa/noticia/el-injuve-presenta-el-proyecto-reconoce-para-mejorar-el-acceso-de-los-jovenes-al-mercado-laboral>

⁽⁶⁷⁾ MEYSS (2018). Resolución de 28 de marzo de 2018, de la Secretaría de Estado de Empleo, por la que se ordena la publicación del Acuerdo de Consejo de Ministros de 27 de marzo de 2018 por el que se aprueba el Plan Anual de Política de Empleo para 2018, según lo establecido en el artículo 11.2 del texto refundido de la Ley de Empleo, aprobado por el Real Decreto Legislativo 3/2015, de 23 de octubre. [Resolution of March 28th, 2018, by the State Secretary for Employment, which orders the publication of the Council of Ministers Agreement of March 27, 2018, approving the Annual Plan for Employment Policy for 2018, as established in article 11.2 of the revised text of the Employment Law, approved by the Royal Legislative Decree 3/2015, of October 23.]. *Boletín Oficial del Estado*, No 77, 29.03.2018, pp. 34109- 34198. <https://www.boe.es/boe/dias/2018/03/29/pdfs/BOE-A-2018-4390.pdf>

Red.es, a public entity for the promotion of the information society, is currently in charge of the following schemes:

(a) *The Digital professionals youth employment scheme*

This scheme ⁽⁶⁸⁾ is part of the digital agenda for Spain, and is jointly funded by the European Social Fund (ESF) 2014-20. It aims to offer to young unemployed people (registered in the national *Youth guarantee* system) training targeted at the digital industry, and facilitate their access to jobs in connection to the digital transformation of companies. Training projects must include a commitment to hire ⁽⁶⁹⁾ a certain percentage of trainees in the field of ICT and the digital economy. Thirty-three projects were approved for a total of EUR 19.95 million ⁽⁷⁰⁾.

(b) *Funding scheme to promote continuing training and improvement of employability in the field of ICT and the digital economy.*

The call for proposals for this scheme was published in April 2018 ⁽⁷¹⁾. It is intended to develop training projects that improve the employability of employed, unemployed and inactive adults, including the most disadvantaged, favouring both access to and greater stability in employment, and career advancement. The almost EUR 11 million budget comes from the European Social Fund (ESF) for the 2014-20 programming period (Operational programme for employment, training and education). Both training actions and training and coaching staff are funded ⁽⁷²⁾.

SEPE, with the support of Fundae, are running the following schemes:

(a) *Call for proposals for the training of workers in professional skills related to technological changes and digital transformation*

⁽⁶⁸⁾ <https://www.boe.es/boe/dias/2017/01/28/pdfs/BOE-B-2017-5135.pdf> ;
<http://www.red.es/redes/>

⁽⁶⁹⁾ The hiring commitment means that at least 30% of the young people who complete the training will be employed for at least 6 months in positions related to ICT and the Digital Economy (maximum of 5% as self-employed workers).

⁽⁷⁰⁾ <https://www.red.es/redes/es/que-hacemos/profesionales-digitales/j%C3%B3venes-desempleados>

⁽⁷¹⁾ <https://perfilcontratante.red.es/perfilcontratante/busqueda/DetalleLicitacionesDefault.action?idLicitacion=7165&visualizar=0>

⁽⁷²⁾ <https://www.red.es/redes/es/que-hacemos/profesionales-digitales/formaci%C3%B3n-continua>

The call was published in May 2018 ⁽⁷³⁾. The social partners in the different sectors, through their joint commissions, agreed the training actions that could be funded according to present and future needs of each sector. The sectoral joint commissions identified up to 226 new training specialties derived from technological and digital evolution, which were not part of the catalogue of training specialties till that time.

This call, with a budget of more than EUR 50 million and 330 projects proposed for approval ⁽⁷⁴⁾, finances three types of training action:

- (a) acquisition of technological or digital competences, crosscutting to the different productive sectors;
- (b) acquisition of technological or digital competences specific to a given sector;
- (c) professional competences in the key sectors for technological development (telecommunication operators, consultancies and engineering companies).

The scheme is targeted at employed workers in general. However, in the crosscutting schemes, women, people with disabilities, workers with low qualification levels and those over 45 years of age are prioritised, while in the sectoral schemes, each sector has defined its own priority groups.

The following technologies are considered priority areas in this call: broadband communications (hybrid networks, interactive television, telephony 5G, optical fibre); cybersecurity, robotics and management and maintenance of 3D printers; artificial intelligence, virtual reality; drones; automotive with electric motor or autonomous driving; cloud computing; internet of things and home automation; advanced analytics (big data, business intelligence, language, report analytics, Python language, among others); cognitive computing; location services; electronic administration; advanced design; and development of information systems.

(b) Call for grants for the financing of training schemes

With a budget of EUR 350 million, this call ⁽⁷⁵⁾ considers training actions aimed at anticipating the qualification needs of the production system, with

⁽⁷³⁾ <https://www.fundae.es/Empresas%20y%20organizaciones/Pages/Convocatoria-TIC.aspx>

⁽⁷⁴⁾ Figure at the time of this report. Applicants, after receiving the approval proposal, may refuse the funding or readapt their plans according to the proposed funding.

⁽⁷⁵⁾ MITRAMISS (2019). Extracto de la Resolución de 17 de enero de 2019, del Servicio Público de Empleo Estatal, por la que se aprueba la convocatoria para la concesión, de subvenciones públicas para la ejecución de programas de formación de ámbito

priority for the internationalisation of companies, entrepreneurship, innovation, technological development of production processes, digitalisation, and energy efficiency. Around 25% of the training specialties to be offered are related to digitalisation and technological development.

The Spanish School of Industrial Organisation (*Escuela de Organización Industrial, EOI*) ⁽⁷⁶⁾, and its associated foundation, runs the *Training Pathway on Digital Transformation for Employment* ⁽⁷⁷⁾ scheme. This scheme, implemented in partnership with Google, is aimed at improving the employability of young people who have dropped out of school from an early age, and have lost their jobs or have difficulties finding their first job. It also enables young people with high educational levels to reskilling. The training itinerary starts with taking a 40-hour MOOC on the Google platform, followed by a mentoring phase. The total budget for this scheme is EUR 1.4 million.

In the education remit, new 'specialisation courses' are being developed, in relation to the incorporation of digital technologies into all economic activities, taking into account the industry 4.0 revolution. The need for specific qualifications is being assessed, as well as the impact that the progressive incorporation of these technological processes has on existing degrees. One of the challenges is also to overcome the gender gap in the access to STEM degrees. In connection with this aim, STEM vocations among girls are being promoted through providing information and female role models in the project Scientix ⁽⁷⁸⁾ and the website ChicaSTEM ⁽⁷⁹⁾

The National Institute of Qualifications (INCUAL), technical body responsible for the design and development of occupational standards which serve as the

estatal, dirigidos prioritariamente a las personas ocupadas [Excerpt from the Resolution of January 17, 2019, of the National Public Employment Service which approves the call for the concession of public subsidies for the execution of training programmes of State scope, directed primarily to employed people]. *Boletín Oficial del Estado*, No 21, 24.01.2019, pp. 3676-3679

<https://www.boe.es/boe/dias/2019/01/24/pdfs/BOE-B-2019-2823.pdf>

⁽⁷⁶⁾ It is a public foundation created in 1955, which has trained more than 60 000 professionals and has contributed to the creation and modernisation of more than 50 000 SMEs. More info at: <http://www.eoi.es/portal/en/about-eoi;jsessionid=D3EA89819386AD4662A04770042F1EA0>

⁽⁷⁷⁾ <https://www.eoi.es/es/cursos/26013/curso-de-transformacion-digital-para-el-empleo-ambito-nacional>

⁽⁷⁸⁾ INTEF. Scientix National Contact Point: <https://intef.es/formacion-y-colaboracion/scientix/>

⁽⁷⁹⁾ INTEF. CodeIntef-ChicaSTEM: <http://code.intef.es/chicastem/>

basis for training offers (VET diplomas and professional certificates), has opened a transversal observatory to gather intelligence on the impact that the industry 4.0 has on professional qualifications, in order to update them and, if necessary, design new ones.

3.3.5.2. *Programme to improve assistance to the long-term unemployed*

The programme was approved in 2016 ⁽⁸⁰⁾. It includes training and guidance activities for the long-term unemployed aged 30 to 54 (although each region may extend the criterion to the long-term unemployed over 55 or under 30 years of age). Each beneficiary receives help from a tutor to set out an individualised itinerary for (re)entering the labour market ⁽⁸¹⁾. The total budget for 2016-18 amounts to EUR 515 million.

3.3.5.3. *Actions for the young*

The Action Plan for Youth Employment 2019-21 includes initiatives in relation to vocational training aimed at enabling beneficiaries to acquire competences or professional experience, upgrade their qualifications and increase their employability. The objective is to train at least:

- (a) 43% (100 000) of young people, registered as unemployed and with no compulsory secondary education qualification, to gain key competences in Spanish and mathematics;
- (b) 30% of young people in linguistic competences;
- (c) 225 000 young people in digital competences;
- (d) 25% (40 000) of young people in strategic sector competences.

⁽⁸⁰⁾ <https://www.boe.es/boe/dias/2016/12/07/pdfs/BOE-A-2016-11658.pdf>

⁽⁸¹⁾ The programme also provides other specific actions, such as:

- (a) Training and upskilling actions for the current staff of each regional public employment service;
- (b) Actions to adapt and improve information and management systems;
- (c) Pilot programmes for the reorganisation of the public employment services;
- (d) Actions directed to the evaluation of the remaining activities funded by this programme.

CHAPTER 4.

MTD 4 – Key competences in both IVET and CVET

4.1. Baseline 2015

In 2015, key competences were part of upper secondary VET ⁽⁸²⁾ as general principles or objectives ⁽⁸³⁾. Specific key competences, such as learning to learn and interpersonal and civic competences, were considered transversal in curricula. Key competences such as communication in a foreign language and entrepreneurship and personal initiative were mostly taught as separate subjects/modules. English was considered essential for increasing employability and modernisation and globalisation of the national economy. Therefore, bilingual VET programmes were being developed. A new ‘communication and society’ subject/module was introduced as of 2014 in Basic VET, targeted at learners without compulsory secondary education certificate ⁽⁸⁴⁾.

There was no centralised assessment of key competences in upper secondary VET. Assessment would take place at subject/module level. Yet, improvement on literacy and numeracy could be evaluated through OECD PIACC and PISA (for 15 years old) studies ⁽⁸⁵⁾.

Digital and entrepreneurship competences were promoted mostly within the ICT and administrative/managerial VET programmes. Professional certificates on entrepreneurship (*Creación y gestión de microempresas*) and cultural expression also existed.

⁽⁸²⁾ Key competences were initially translated as *competencias básicas* but in 2015 the order 65/2015 has defined also *competencias clave* for VET.

<http://www.boe.es/boe/dias/2015/01/29/pdfs/BOE-A-2015-738.pdf>

⁽⁸³⁾ This introductory section presents the 2015 state-of-play in the MTD as a baseline for the monitoring exercise. Most of the situation it describes has remained unchanged over the reporting period and is therefore still in place at the end of the reporting period. The next sections in this MTD focus on what has changed with respect to this 2015 baseline, and how.

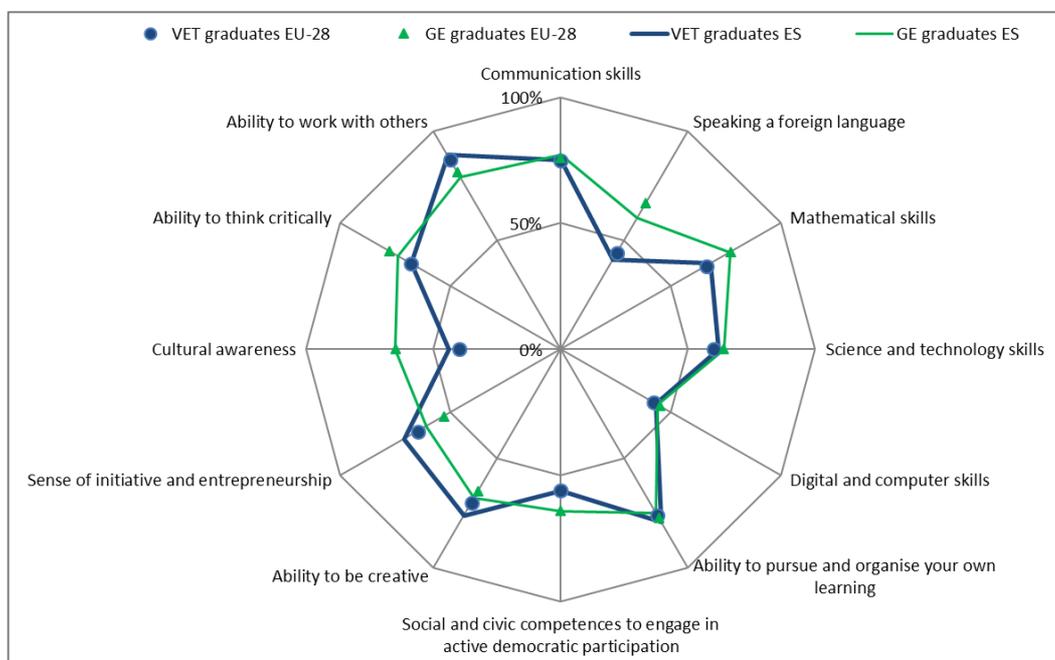
⁽⁸⁴⁾ For more information on key competences in VET see: [Servicio Público de Empleo Estatal \(2016\). Key competences in vocational education and training – Spain. Cedefop ReferNet thematic perspectives series.](#)

⁽⁸⁵⁾ For more information on key competences in VET see: [Servicio Público de Empleo Estatal \(2016\). Key competences in vocational education and training – Spain. Cedefop ReferNet thematic perspectives series.](#)

A recent survey ⁽⁸⁶⁾ showed that, compared with general education graduates, those who completed VET programmes felt they had:

- (a) stronger (ranged by priority):
 - (vi) sense of initiative and entrepreneurship;
 - (vii) ability to work with others;
 - (viii) ability to be creative;
- (d) weaker:
 - (i) cultural awareness
 - (ii) foreign language speaking;
 - (iii) mathematical skills (Figure 2).

Figure 2. **Self-evaluation of acquired skills in general education and VET in 2016**



NB: GE stands for general education.

Respondents who attended upper secondary education. Interviewees were asked in summer 2016 about their overall experience in upper secondary education. Aggregated data do not take account of different types and sectors of VET and age groups of respondents.

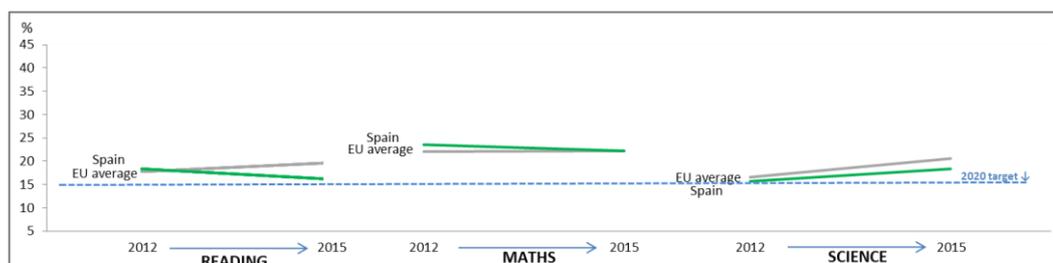
Source: Cedefop, 2017b.

The context of key competences in 2015 was mainly characterised by a decreasing share of young low achievers in reading and maths and increasing

⁽⁸⁶⁾ See Cedefop (2017). Cedefop European public opinion survey on vocational education and training. Luxembourg: Publications Office. Cedefop research paper; No 62 .
<http://dx.doi.org/10.2801/264585>

share in science compared with 2012 (Figure 3). Except in maths, the share of low achievers in Spain was lower than in the EU on average.

Figure 3. **Share of 15-year-olds with low achievement in reading, maths and science**



NB: Low achievement means failing level 2 on the PISA (programme for international student assessment) scale.

Source: OECD, 2014; OECD 2016.

As VET enrolled 35% of all upper secondary learners in the country ⁽⁸⁷⁾, this trend was likely to be reflected in the key competences trained for in VET programmes.

4.2. Key competences addressed in the reporting period

Table 2 outlines the key competences in initial and continuing VET that were addressed in the reporting period. A description of policies is provided in the following sections.

Table 2. **Key competences addressed in 2015-19**

	IVET	CVET
Country language(s) and literacy	YES	YES
Foreign languages	YES	YES
Digital competence		YES
Maths	YES	YES
Science		
Technology		YES
Social and civic competences		
Learning to learn		
Financial literacy	YES	
Entrepreneurship competence	YES	

⁽⁸⁷⁾ Calculated from Eurostat; data for 2015.

	IVET	CVET
Cultural awareness and expression		
Key competences as a package	YES	

NB: The list derives from the 2006 EU key competences framework for lifelong learning; it has been restructured and expanded with additional competences that can be considered key.

Source: Cedefop based on ReferNet input.

4.3. Key competences in initial VET

For 2016-20, the country's priority in this area is to make visible and promote subject-related methods which support transversal integration of the key competences already embedded in VET diplomas.

In intermediate VET, legislation ⁽⁸⁸⁾ allows the regions to offer optional language training (Spanish and foreign), mathematics and other subjects to upper secondary VET learners willing to progress to higher studies. Implementation began in 2016-17.

A 2015 Ministerial Decree ⁽⁸⁹⁾ provides for the revision and update of key competences in curricula. This describes the relationship between competences, content and evaluation criteria for primary, compulsory and secondary education. Implications are that key competences should be integrated into the curriculum (including in VET); they should be defined, explained and well-developed; the selection of content and methodologies should ensure the development of key competences throughout academic life; evaluation criteria should serve as a reference for assessment; and key competences are to be broken down into assessable learning standards that help measure whether they have been achieved.

In foreign languages, several regions (competent in the management of the regional education system) are supporting bilingual programmes at different VET levels ⁽⁹⁰⁾.

Financial literacy is on the agenda as well. The Bank of Spain has developed a financial education plan, which has been running since 2008 ⁽⁹¹⁾ and was reiterated for 2018-21. The programme is free, voluntary and flexible, aimed mainly at pupils aged 14 and 15 years, although it can be adapted to learners at

⁽⁸⁸⁾ Article No 42 of the 2013 education Law (LOMCE), Organic Act No 8 of 9.12.2013 on the improvement of quality in education.

⁽⁸⁹⁾ ECD/65/2015.

⁽⁹⁰⁾ See as examples [here](#), [here](#) and [here](#).

⁽⁹¹⁾ <https://www.cnmv.es/portal/Publicaciones/PlanEducCNMV.aspx>

primary education, baccalaureate and VET cycles levels. It is composed of 10 modules, which each teacher can adjust to their educational programming. It is recommended to deliver it in a transversal way, in one or in different subjects, or subjects for the promotion of entrepreneurship. The contents are related to the key competences. Resources are available for the education centres and teachers participating in the programme, including manuals in the joint official languages and in English. Web portals are in place ⁽⁹²⁾.

Also, under the Finance for all programme, the National Institute of Educational Technologies and Teacher Training (INTEF) offers a package of six open and online nano courses ⁽⁹³⁾.

4.4. Key competences in continuing VET

Subsidised training for employment supports the acquisition of key competences, especially for those who left school without a secondary education certificate so they can access professional certificate programmes at levels 2 and 3. In 2015 and 2016, the State public employment service (Servicio Público de Empleo Estatal, SEPE) published calls for proposals which also offered key competences for adults and young people (within and outside the *Youth guarantee* programme), and early leavers from education and training. Although not exclusively devoted to key competences, these calls for proposals cover training in maths and Spanish language (in some cases, also foreign languages) for workers who lack the necessary qualification to study a certificate programme. Key competences training takes place before the certificate programme, allowing people with low qualifications access to training in order to obtain a full or partial professional certificate.

The call for proposals launched in May 2018 for the acquisition and improvement of professional skills related to technological changes and digital transformation (Section 3.3.5.1) also contributes to reinforcing adults' key competences.

Unemployed young people, living in small towns, are the target of a new funding scheme put in place by the Ministry of Territorial Policy. The funds, EUR 80 million, will be granted to public local entities ⁽⁹⁴⁾ to finance projects that

⁽⁹²⁾ For teachers www.finanzasparatodos.es and the wide public www.gepeese.es

⁽⁹³⁾ <http://blog.educalab.es/intef/2017/10/30/nuevos-nooc-sobre-educacion-financiera/>

⁽⁹⁴⁾ Real Decreto 1234/2018, de 5 de octubre establece las bases reguladoras para la concesión directa de subvenciones a Entidades Locales, en el marco del Programa Operativo de Empleo Juvenil del Fondo Social Europeo (ayudas EMP-POEJ). [Royal

increase the employment and entrepreneurship of young people who live, or will do so, in municipalities with a population of less than 10 000 inhabitants which have presented a negative demographic balance in the last decade. It considers specific training in self-employment and in subjects typical to given territories, such as tourism, traditional crafts, agriculture, livestock, artistic heritage, and environmental protection.

Decree 1234/2018, of October 5, which establishes the regulatory bases for the direct granting of subsidies to Local Entities within the framework of the ESF Operational Programme on Youth Employment].
<https://www.boe.es/eli/es/rd/2018/10/05/1234/dof/spa/pdf>

CHAPTER 5.

MTD 5 – Systematic initial and continuing professional development of VET teachers and trainers

5.1. Baseline 2015

A 2014 country specific recommendation from the European Union set as a goal the increase of the labour market relevance of vocational education and training, in particular by enhancing the cooperation with employers and supporting the training of in-company trainers/tutors. Reinforcement of teachers' competence was also called for by the Organic Law for the Improvement of the Quality of Education (2014-15).

At the beginning of the reporting period ⁽⁹⁵⁾, four main categories of teachers and trainers were at play in VET programmes in the education system:

- (a) secondary school teachers;
- (b) technical vocational teachers;
- (c) experts in different professional sectors;
- (d) in-company trainers (nationally referred to as trainers/tutors involved in the practical training module at workplaces).

In vocational training for employment (FPE), the following were involved:

- (a) trainers/instructors, teaching theoretical technical content;
- (b) technical teachers, providing vocational technical and practical content in situations closer to the reality of work;
- (c) in-company trainers/tutors; and
- (d) experts in different professional sectors.

All VET programmes included a practical training period at a workplace, which could involve both teachers from a VET centre and in-company trainers/tutors.

⁽⁹⁵⁾ This introductory section presents the 2015 state-of-play in the MTD as a baseline for the monitoring exercise. Most of the situation it describes has remained unchanged over the reporting period and is therefore still in place at the end of the reporting period. The next sections in this MTD focus on what has changed with respect to this 2015 baseline, and how.

5.1.1. Access to VET school teaching: entry requirements and initial training

Initial training requirements ⁽⁹⁶⁾ to become a secondary level general and VET teacher were the same throughout the entire State (Royal Decree 1834/2008):

- (a) a university degree (ISCED 6);
- (b) a master degree in teacher training (for secondary education, higher secondary education, VET and languages).

A period of internship training at an education centre was compulsory for all future teachers ⁽⁹⁷⁾.

Regional education authorities regularly held public competition exams to hire the necessary personnel.

Trainers in VET programmes of the training for employment system were recruited through direct open hiring procedures held by private training centres approved by the labour authorities. Requirements in terms of academic studies, professional experience, and teaching competence were set out for each training module by the labour regulations. In 2012, 74% of trainers held an ISCED 6 or higher degree, and 13% an ISCED 5 degree. Only 13% had completed an education programme at a lower than ISCED 5 level. Trainers were not usually permanent staff.

Teachers whose functions implied online teaching also had to have proof of digital competence or teaching experience in this type of training mode (Spanish Ministry of Employment and Social Security, 2013).

5.1.2. In-company trainers: entry requirements and initial training

In-company trainers had to guide, monitor and assess apprentices. They were professionals with extensive experience in their field. They did not need to have teaching qualifications.

5.1.3. VET school teachers: main lines for CPD

Continuing training requirements and the conditions for acknowledgement, support and evaluation of VET teachers in public centres were established in the 2006 Organic Law on Education (LOE), modified by the 2013 Organic Law for Improvement of Education Quality (LOMCE), which was implemented in 2014/15.

⁽⁹⁶⁾ Initial training requirements for VET teachers in public centres were established in the 2006 Organic Law on Education (LOE), modified by the 2013 Organic Law for Improvement of Education Quality (LOMCE), which was implemented in the 2014/15 school year.

⁽⁹⁷⁾ Participation in practical training would also translate into training credits taken into account for salaries.

The National Institute of Educational Technologies and Teacher Training (INTEF) and the National Centre for Educational Research and Innovation (CNIIE) cooperated to support teachers and trainers. The education ministry carried out a training course in entrepreneurship in cooperation with the Higher Council of the Chambers of Commerce. INTEF has devoted specific attention to open educational resources (OER) for Vocational Training for a long time ⁽⁹⁸⁾.

At the autonomous community level, centres for teacher training and continuing training (supported by a network of national reference centres) used to plan training activities annually in various fields. Priorities in CVET for teachers in regional plans were linked to the needs of the major economic sectors and economic activities in the region.

In the employment system, a compulsory training programme in adult training was launched in 2013.

In 2013, 83.7% of teachers participated in training and professional development activities. In the training for employment system, 66% of trainers in VET programmes also participated in continuing professional development (CPD) programmes.

5.2. Initial training for teaching/training staff in VET schools 2015-19

The country's priority in this area for 2016-20, as set by the Director General for Vocational Education and Training (Education Ministry), is to strengthen the common training framework to access the teaching profession in VET.

A draft white paper on teaching was briefed from an external expert by the Ministry of Education in December 2015. It aimed at building a consensus among regions and education stakeholders on comprehensive reform of the teaching role and teacher professional status. This is part of a more general discussion related to reaching a State pact on education, which is the subject of various actions taken by different stakeholders and political debates in recent years, but still under discussion.

In February 2017, a subcommittee was created in the Congress of Deputies for the elaboration of a pact for education. The education community has participated in the work of the subcommittee through interventions by representatives of teachers, learners, families, schools, and experts.

⁽⁹⁸⁾ INTEF. Simuladores de Formación Profesional:
<http://recursostic.educacion.es/fprofesional/simuladores/web/>

Disagreements about budgetary issues and the management/governance of education by regions led some political parties to withdraw from the subcommittee. In May 2017, the term to resume this task expired without any further work.

During 2017, discussions also took place at a Sectoral Conference on Education. Access to the teaching profession was discussed, and a revision of legislation ⁽⁹⁹⁾ was agreed. An Educate for the 21st century forum was held on 6 November in which challenges and proposals on the teaching profession developed by experts over the last few years were presented ⁽¹⁰⁰⁾. Agreement was reached on the need to moderate the recruitment of temporary staff (a consequence of the economic crisis). Greater stability in school staff is seen as a condition for education quality. There is also a commitment to addressing teacher training from a lifelong learning approach.

5.3. Initial training for trainers in enterprises 2015-19

For 2016-20, the country's priority in this area, as set by the Director General for Vocational Education and Training (Education Ministry), is to encourage cooperation with the chambers of commerce and other business organisations for training in-company trainers/tutors who participate in dual VET.

Law No 30 of 2015, which regulates vocational training for employment under the authority of the public employment service, included in its objectives for 2015-18 the promotion of training for in-company trainers/tutors; assessors and advisors involved in skills evaluation and validation; career counsellors; managers and those responsible for vocational training centres.

5.4. CPD for teaching/training staff in VET schools 2015-19

The country's priorities in this area for 2016-20, as set by the Director General for Vocational Education and Training (Education Ministry), are to:

- (a) boost improvement and updating of VET teachers to respond to social needs and those of the labour market;

⁽⁹⁹⁾ Royal Decree 276/2007 of 23 February 2007 regulating entry, access and acquisition of new specialties in the teaching bodies.

⁽¹⁰⁰⁾ <http://www.educacionyfp.gob.es/yosoyprofe/inicio.html>

- (e) promote the recognition of training activities and other merits for VET teacher careers.

CPD for teachers is under the remit of autonomous communities. A grading system in place takes into account CPD activities undertaken by teachers which, together with work experience, facilitates regional and national mobility ⁽¹⁰¹⁾. CPD programmes take into account training periods in enterprises, both in companies located in Spain and abroad ⁽¹⁰²⁾.

In December 2018 ⁽¹⁰³⁾, the Council of Ministers approved EUR 8.6 million (three times the previous budget), jointly financed by the European Social Fund, for VET teacher training, upskilling and mobility. The distribution criteria, agreed by autonomous communities, take into account the number of teachers and the number of secondary schools and / or baccalaureate centres and / or VET centres.

In the context of VET within the education system, the education community can find and create structured teaching material ready to be downloaded and used by teachers and learners in Procomún, the repository of open educational resources (OER) of the ministry, operated by INTEF ⁽¹⁰⁴⁾. Another initiative is the Educational Technology Observatory, which provides a virtual library with articles for teachers written by teachers about how to use digital innovation in non-university education ⁽¹⁰⁵⁾. The National Centre of Curriculum Development in Non-Proprietary Systems (CeDeC) – dependent on the INTEF and the Government of Extremadura – has started to publish VET OERs closely related to new active methodologies ⁽¹⁰⁶⁾. This offer is intended to match the needs of different curricula and aims at promoting social networking to aid the exchange of experiences and resources between teachers.

INTEF is also responsible for the integration of ICT in non-university education, collaborating with the autonomous communities. Developments in the reporting period include:

⁽¹⁰¹⁾ And allows for salary premium every six years worked cumulatively.

⁽¹⁰²⁾ Example: Asturias: <http://www.educastur.es/-/estancias-de-formacion-en-empresas>

⁽¹⁰³⁾ <http://www.educacionyfp.gob.es/prensa/actualidad/2018/12/20181207-programas.html>

⁽¹⁰⁴⁾ VET OER in Procomún: <http://procomun.educalab.es/es>

⁽¹⁰⁵⁾ INTEF. Educational Technology Observatory: <https://intef.es/tecnologia-educativa/observatorio-de-tecnologia-educativa/>

⁽¹⁰⁶⁾ CeDeC. EDIA (Educative, Digital, Innovative, Open) Project: <http://cedec.intef.es/proyecto-edia-formacion-profesional/>

- (a) *Digital competence framework for teachers*, a project which will serve as a basis for training plans and digital culture in schools. This is an adaptation of DigComp 2.1, the European framework for digital competence for citizens, to the teacher profession; it also includes descriptors of the European DigCompEdu framework. The last version was elaborated in October 2017 ⁽¹⁰⁷⁾;
- (f) new training modalities ⁽¹⁰⁸⁾: massive open online courses (MOOC) and social learning activities in virtual communities of practice, made available to teachers for their CPD. Differentiated open and online courses are offered:
 - (i) since March 2016, a specific MOOC for entrepreneurship, focused on VET. In September 2017, INTEF launched a new online course *Initiative and entrepreneurship in the classroom* for teachers in State-funded schools;
 - (ii) nano massive online open courses (NOOC), launched in spring 2016, a scheme that gives teachers the opportunity to explore, learn and be assessed, either on a key competence element or a skill or area of knowledge, over a period of time from a minimum of one hour up to a maximum of 20 hours (see Section 4.3 about financial literacy for example);
 - (iii) self-paced open online course (SPOOC INTEF), an experimental self-learning initiative launched in December 2016, oriented to the development of professional skills, such as autonomous management of learning. Each SPOOC created by INTEF has an instructional design focused on participants being able to attain their own learning objectives at their own pace, develop their autonomy as learners in digital contexts, improve their digital competence and demonstrate it in an aggregated digital product, valuable for the education community;
- (e) Digital competence portfolio for teachers, launched in October 2017, focusing on the self-assessment and improvement of digital competences, and aligned to online teacher training modalities. It is based on the Spanish digital competence framework for teachers.

⁽¹⁰⁷⁾ INTEF. Spanish Digital Competence Framework for Teachers (October 2017): <https://aprende.intef.es/mccdd>

⁽¹⁰⁸⁾ Further information at <https://enlinea.intef.es/>

- (f) the Ministry of Education, through INTEF, launched Open badge backpack ⁽¹⁰⁹⁾ in order to recognise skills and competences in informal learning. This is the digital service currently used to issue badges based on the successful completion of INTEF's open online training.
- (g) in March 2017, INTEF launched Edupills, a mobile app for micro self-training ⁽¹¹⁰⁾. It is aimed at the improvement of digital competences;
- (h) the School of Computational Thinking ⁽¹¹¹⁾ was set up in the academic year 2018/19 to train teachers to develop programming and robotics in their classrooms. In primary education, teachers use computer programming using Scratch 3.0 as a resource to learn mathematics. Arduino and working with cooperative learning structures let the students enjoy creative technology classes. Baccalaureate and VET students begin practising Python language, mechanics and electronics contents using a simulator that enables them to programme devices such as drones, autonomous Formula 1 cars or robots. The website CodeIntef ⁽¹¹²⁾ offers additional resources and information;
- (i) in 2018, INTEF has included a new priority line of training: VET models for innovation and employability. On-line and face-to-face courses are forthcoming.

Annually, the Ministry of Science, Innovation and Universities and the International University Menéndez Pelayo offer immersion courses in English, including a specialised English course for teachers and graduates of the master degree in teaching. There are scholarships that cover tuition fees and materials.

The Ministry of Education also publishes calls for online training courses for teachers below university level and for managerial skills. Calls for grants for teachers below university level are also in place to carry out professional visits in education centres in European countries. During these study and observation visits, a European training or education centre receives the Spanish teacher for a period of two weeks.

⁽¹⁰⁹⁾ <http://insignias.educalab.es>

⁽¹¹⁰⁾ <http://edupills.educalab.es>

⁽¹¹¹⁾ INTEF, School of Computational Thinking: <https://intef.es/tecnologia-educativa/pensamiento-computacional/>

⁽¹¹²⁾ INTEF, CodeIntef: <http://code.intef.es/>

5.5. CPD for trainers in enterprises 2015-19

Law No 30 of 2015 (Section 5.3) also covers in-company trainer/tutor CPD.

The national reference centres (NRCs) ⁽¹¹³⁾ offer training activities ⁽¹¹⁴⁾ for VET trainers to develop their technical capacity, improve their didactic skills and increase their professionalism. Courses are usually face-to-face, aimed primarily at active trainers ⁽¹¹⁵⁾.

Teachers and trainers, like any other worker, can take part in programmes financed through calls for grants under the VET system in the labour area. The call for proposals for the training of workers in professional skills related to technological changes and digital transformation (Section 3.2.5.1) foresaw several training actions, as a result of the training needs analysis performed by sectoral joint committees ⁽¹¹⁶⁾. More than 30 different training courses address concrete digital training needs of teachers and trainers: becoming an e-learning tutor; how to apply ICT in the classroom; how to provide professional guidance on-line; and robotics in the classroom.

Within the framework of the Alliance for dual VET, a handbook ⁽¹¹⁷⁾ for in-company trainers/tutors in dual VET was published. The alliance, in collaboration with other entities, is also organising or supporting training actions for in-company trainers/tutors. More than 160 in-company trainers/tutors ⁽¹¹⁸⁾ took part in these courses in 2018 and new ones were to be delivered during 2019 ⁽¹¹⁹⁾.

⁽¹¹³⁾ <https://www.sepe.es/HomeSepe/Personas/formacion/centros-de-referencial-nacional/que-son-los-CRN.html>

⁽¹¹⁴⁾ <https://www.sepe.es/HomeSepe/Personas/formacion/plan-perfeccionamiento-profesorado.html>

⁽¹¹⁵⁾ Example: <http://www.servef.gva.es/web/crnfp-paterna/formacion-de-formadores>

⁽¹¹⁶⁾ <https://www.fundae.es/Empresas%20y%20organizaciones/Pages/Documentaci%C3%B3n-TIC.aspx>

⁽¹¹⁷⁾ https://www.fundacionbertelsmann.org/fileadmin/files/Fundacion/Publicaciones/Manual_Tutores_web_vf_.pdf

⁽¹¹⁸⁾ Courses started in November 2017:
<http://www.alianzafpdual.es/event/cursos-de-tutores-de-empresa-en-la-fp-dual-2017-2018/>

⁽¹¹⁹⁾ <https://www.gobiernodecanarias.org/noticias/hemeroteca/eu/104921/consejeria-educacion-forma-tutores-empresa-fp-dual>

Statistical overview: 2019 update

Table 3 updates the figures that were provided in Table 1. Although Table 1 may contain data for 2015, these are not systematically repeated here. In some cases, not repeating is due to breaks in time series, which prevent comparability. In other cases, values differ due to methodological changes.

Table 3. **Score on VET indicators in Spain and in the EU: 2015, last available year and recent change**

Indicator label	2015				Last available year				Recent change			
	ES	f	EU	f	Yr	ES	f	EU	f	Range	ES	EU
Access, attractiveness and flexibility												
IVET students as % of all upper secondary students	35.2		47.3	ce	'17	35.3		47.8	ce	'15-'17	0.2	0.5
IVET work-based students as % of all upper secondary IVET	1.2		28.3	ce	'17	2.7		27.9	ce	'15-'17	1.5	-0.5
IVET students with direct access to tertiary education as % of all upper secondary IVET	62.1		68.1	ce	'17	59.5		68.6	ce	'15-'17	-2.6	0.4
Workers participating in CVT courses (%)	55.4		40.8		'15	55.4		40.8				
Workers participating in on-the-job training (%)	23		34		'15	23		34				
Adults in lifelong learning (%)	9.9		10.7		'18	10.5		11.1		'15-'18	0.6	0.4
Enterprises providing training (%)	86		72.6		'15	86		72.6				
Female IVET students as % of all female upper secondary students	32.4		42	ce	'17	32.9		42.7	ce	'15-'17	0.5	0.7
Employees of small firms participating in CVT courses (%)	38.9		30		'15	38.9		30				
Young VET graduates in further education and training (%)	39.2		33		'18	43		33		'15-'18	3.8	0
Older adults in lifelong learning (%)	5		6.9		'18	5.7		7.3		'15-'18	0.7	0.4
Low-educated adults in lifelong learning (%)	3.6		4.3		'18	3.7		4.3		'15-'18	0.1	0
Unemployed adults in lifelong learning (%)	11.2		9.5		'18	12.8		10.7		'15-'18	1.6	1.2
Individuals who wanted to participate in training but did not (%)					'16	9.8		11.4				
Job-related non-formal education and training (%)					'16	79.5		79.4				

Skill development and labour market relevance												
IVET public expenditure (% of GDP)	0.3		0.5	ce	'16	0.3		0.5	ce	'15-'16	0	0
IVET public expenditure per student (1000 PPS units)	7.8		7.1	ce	'16	8.5		7.4	ce	'15-'16	0.7	0.3
Enterprise expenditure on CVT courses as % of total labour cost	0.9		0.9		'15	0.9		0.9				
Average number of foreign languages learned in IVET	0.3		1	ce	'17	0.4		1	ce	'15-'17	0.1	0
STEM graduates from upper secondary IVET (% of total)	22.4		29.2	ce	'17	24.7		29.1	ce	'15-'17	2.2	0
Short-cycle VET graduates as % of first time tertiary education graduates	34.9				'17	36.7		14.3	b ce	'15-'17	1.8	
Innovative enterprises with supportive training practices (%)					'16	19.5	d	37.7				
Employment rate for IVET graduates (20-34 year-olds)	70.2		77.2		'18	75.8		80.5		'15-'18	5.6	3.3
Employment premium for IVET graduates (over general stream)	0.4		5.4		'18	6.2		6.6		'15-'18	5.8	1.2
Employment premium for IVET graduates (over low-educated)	14		23.7		'18	14.1		23.3		'15-'18	0.1	-0.4
Workers helped to improve their work by training (%)	85.4		83.7		'15	85.4		83.7				
Workers with skills matched to their duties (%)	55.3		57		'15	55.3		57				
Overall transitions and labour market trends												
Early leavers from education and training (%)	20		11		'18	17.9		10.6		'15-'18	-2.1	-0.4
30-34 year-olds with tertiary attainment (%)	40.9		38.7		'18	42.4		40.7		'15-'18	1.5	2
NEET rate for 18-24 year-olds (%)	20.1		15.8		'18	16.1		13.7		'15-'18	-4	-2.1
Unemployment rate for 20-34 year-olds (%)	28.7		12.9		'18	20.4		9.4		'15-'18	-8.3	-3.5
Employment rate of recent graduates (%)	62.2		75.9		'18	72.7		80.6		'15-'18	10.5	4.7
Adults with lower level of educational attainment (%)	42.6		23.5		'18	39.9		21.9		'15-'18	-2.7	-1.6
Employment rate for 20-64 year-olds (%)	62		70		'18	67		73.1		'15-'18	5	3.1
Employment rate for 20-64 year-olds with lower level of educational attainment (%)	50.6		52.6		'18	56.6		56.1		'15-'18	6	3.5
Medium/high-qualified employment in 2030 (% of total)					'18	71.2	D	85.8	D			

EU refers to EU-28, unless otherwise specified.
(D) Forecast made in 2018.
(ce) Cedefop estimate based on available country data
(b) Eurostat: 'break in time series'.

(u) Eurostat: 'low reliability'.
(z) Eurostat: 'not applicable'.
(e) Eurostat: 'estimated'.
(d) Eurostat: 'definition differs'.

Source: Cedefop, 2020.

In 2017, 35.3% of all upper secondary students in Spain were enrolled in IVET. This percentage is 12.5 points below the EU average. It appears, however, that the percentage of upper secondary students in IVET is higher by 0.2 points compared to the situation in the country in 2015.

In 2017, 2.7% of all upper secondary IVET students were enrolled in a work-based learning setting, which is higher (1.5 points more) than in 2015. In contrast, the EU average is 27.9%.

In 2018, 10.5% of adults participated in lifelong learning activities, which is slightly higher (0.6 points more) than in 2015. The EU average is 11.1%.

In 2018, the employment rate for IVET graduates (20-34 years old) was 75.8%. It appears that the employment rate for IVET graduates (20-34 years old) is higher by 5.6 points compared to the situation in the country in 2015. The EU average is 80.5%.

Conclusion

Since 2015, Spain has taken measures to reform and strengthen its dual VET system, also through securing the support of a range of stakeholders. Cooperation between central government and the regions helped to harmonise quality assurance mechanisms in IVET, and big data techniques are being mobilised to improve skills anticipation for the design of public training programmes. Actions were run to provide the long-term unemployed and beneficiaries of the *Youth guarantee* with training opportunities. Measures were taken supporting the development of key competences. Progress was also made towards further organising the initial training of VET teachers and the continuing professional development of VET teachers and in-company trainers.

The main changes in 2017 have taken place in MTDs 3 and 4. In MTD 3, a draft Royal Decree on access and admission to VET was prepared, aimed to harmonise admission criteria nationwide ⁽¹²⁰⁾. The *Reconoce* project, targeted at improving the validation of non-formal education, was launched ⁽¹²¹⁾. A call for organisations to offer digital training for beneficiaries of the *Youth guarantee* scheme was published ⁽¹²²⁾. In MTD 4, the forthcoming launch of a call for proposals to carry out training programmes for adults to address technological changes and digital transformation was announced ⁽¹²³⁾. The Employment activation strategy adopted in 2017 emphasised the importance of dual VET and apprenticeship ⁽¹²⁴⁾.

Compared to 2015-17, the main changes in 2018 have taken place in MTD 3. A strategic boost was given to VET through the October 2018 *Strategic plan for vocational training* and the February 2019 Agenda for change (Section 3.3.1). Initiatives were taken through the 2019-21 Action plan for youth employment in the areas of guidance (Section 3.3.2) and youth training for employment (Section 3.3.5.3).

The actions carried out show that the main lines of the Riga conclusions and the country's policy priorities for 2016-20 are being addressed. Information currently available to Cedefop suggests issues that could benefit from further

⁽¹²⁰⁾ See Section 3.3.3.

⁽¹²¹⁾ See Section 3.3.4.

⁽¹²²⁾ See Section 3.3.5.1.

⁽¹²³⁾ See Section 3.3.5.1.

⁽¹²⁴⁾ See Section 1.3.1.

consideration, including further developing the Spanish qualifications framework (*Marco Español de Cualificaciones*, MECU) and further structuring the entry requirements to the functions of in-company trainers/ tutors involved in dual VET.

Acronyms

AES	adult education survey
CEOE	confederation of employers' organisations
CEPYME	confederation of small and medium-sized enterprises
CNIIIE	Centro Nacional de Innovación e Investigación Educativa (National Centre for Educational Research and Innovation)
CdP	Certificado de Profesionalidad (professional certificate)
CPD	continuing professional development
CVET	continuing vocational education and training
DGVTs	Directors General for Vocational Training
EQAVET	European quality assurance in vocational education and training
ESF	European Social Fund
Eurostat	statistical office of the European Union
GE	general education
ICT	information and communication technology
INCUAL	Instituto Nacional de las Cualificaciones (National Institute of Qualifications)
INTEF	Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado (National Institute of Education Technologies and Teacher Training)
ISCED	international standard classification of education
IVET	initial vocational education and training
LOE	Ley Orgánica de Educación 2006 (2006 organic law on education)
LOMCE	Ley Orgánica 8/2013 para la Mejora de la Calidad Educativa (organic Law No 8/2013 on improving education quality)
MECU	<i>Marco Español de Cualificaciones</i> - Spanish qualifications framework
MOOC	massive open online courses
NEET	not in education, employment, or training
NGO	non-governmental organisation
NOOC	nano massive open online courses
OECD	Organisation for Economic Cooperation and Development
PAPE	Plan Anual de Política de Empleo (annual plan for employment policy)
PISA	programme for international student assessment
PPS	purchasing power standards
QANRP	quality assurance national reference point
SNCFP	Sistema Nacional de Cualificaciones y Formación Profesional (national system for qualifications and vocational education and training)
SEPE	Servicio Público de Empleo Estatal (State Public Employment Service)

SMEs	small and medium-sized enterprises
SPOOC INTEF	self-paced open online course
STEM	science, technology, engineering and math programmes
UIMP	<i>Universidad Internacional Menéndez Pelayo</i> (International University <i>Menéndez Pelayo</i>)
UOE	UNESCO, OECD, Eurostat
VET	vocational education and training

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